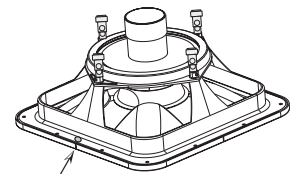
KICKER
Solo X
SPA1R
Livin' Loud
Owner's Manual
S18XSP SPA1R Assembly

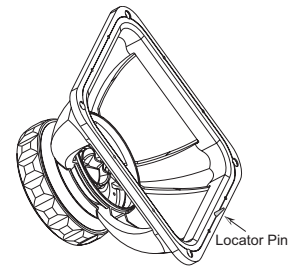
Descriptions

This box contains one SPAIR which is the replaceable moving parts assembly for use with your SoloX 18 subwoofer. If or when you let the Magic Smoke out of your SoloX 18 you can quickly and easily repair it without having to remove and replace the very large and very heavy motor assembly.

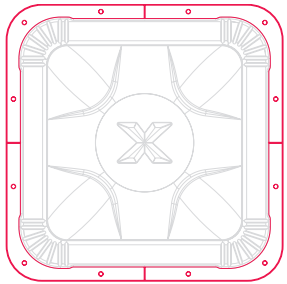
The following is a brief description of the various parts of the SoloX 18 and SPAIR you will be encountering in your replacement.



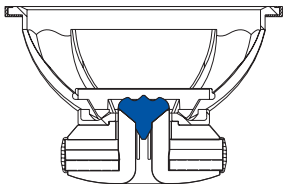
This is the SPAIR, **S**imple **P**ull **A**part **I**nsertable **R**eplacement. It is the replaceable moving parts assembly for your SoloX 18. **NOTE:** The Locator Pin Hole insures proper alignment of the SPAIR to the BAM. This hole must line up with the Locator Pin on the BAM for proper assembly.



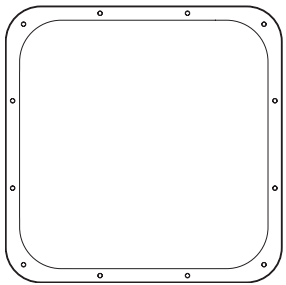
This is the BAM, **B**asket **A**nd **M**otor assembly, and is the 90+ pound cast aluminum monster that mounts to your enclosure to hold the SPAIR and give it life.**NOTE:** The Locator Pin insures proper alignment of the SPAIR to the BAM. This pin must line up with the Locator Pin Hole on the SPAIR for proper assembly.



This is the SLAM, **S**PAIR **L**ockdown **A**ttachment **M**echanism, and is the four piece aluminum ring with 12 mounting holes attached to the front of the SPAIR. This ring provides a solid surface for the hardware to secure the SPAIR to the BAM.



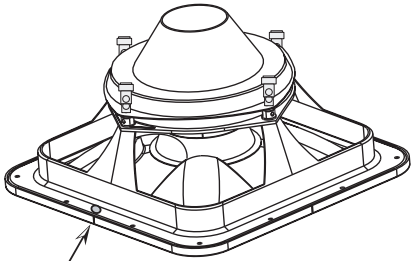
The highlighted piece in the center of the cutaway view is the ARCTIC Cap, **A**luminum **R**apid **C**ooling **T**hermal **I**nduction **C**entering, and has several jobs. The most important to you right now is to help center your SPAIR while you are placing it into the BAM.

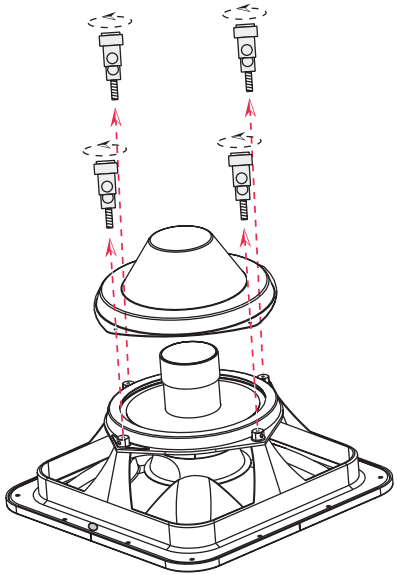


This ring is the SPLAT, **S**peaker **P**recise **L**ocation **A**lignment **T**ool, and is the threaded metal part mounted underneath your enclosures baffle. This part came with your SoloX 18 and provides alignment and anchoring for the BAM and SPAIR. All the hardware which holds the BAM and SPAIR together thread into the SPLAT.

UNPACK SPAIR

1. Once you have removed the SPAIR from the cardboard shipping carton you need to remove the protective Coil Cap. The Coil Cap is attached to the spair with the four binding posts.



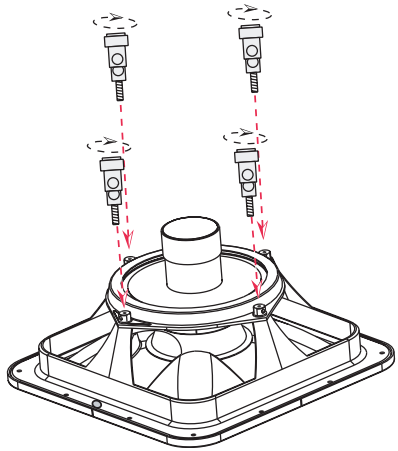


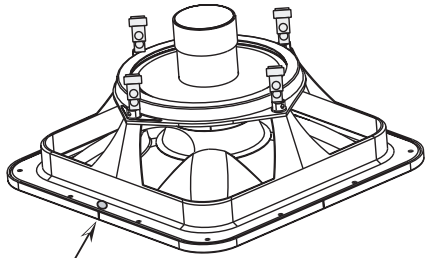
2. Simply unscrew the four binding posts (counter-clockwise) and then gently lift the Coil Cap from the SPAIR assembly being careful not to damage the voice coil.

3. With the Coil Cap now removed you can screw the four binding posts (clockwise) back into the SPAIR assembly.

Note:

The **B3 Link** system offers 3 ways to attach your speaker wires to the SPAIR; **B**inding post, **B**arrier strip and terminal **B**lock. If you are using the terminal block or barrier strip method to attach your speaker wires, use the appropriate hardware included with your S18X in place of the binding posts. *See your S18X owners manual for more details.*



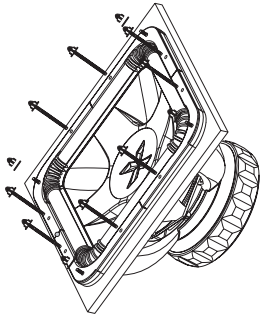


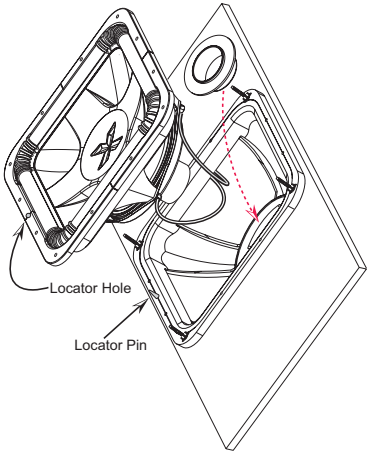
Locator Pin Hole In SPAIR

4. With your binding posts or other hardware now attached to the SPAIR, place it voice coil side up in a *CLEAN and SAFE* location to protect it from damage until you are ready to put it in the BAM (Basket And Motor) assembly.

Disassemble

1. Remove the (4) four acorn head nuts and (8) eight bolts securing the SPAIR to the BAM.

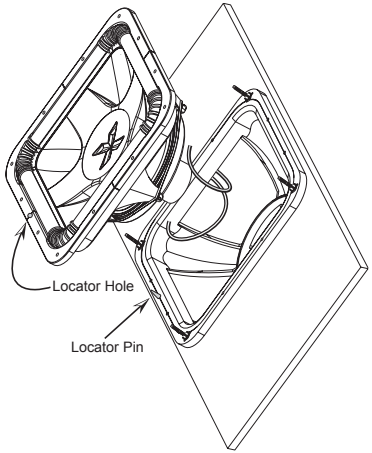


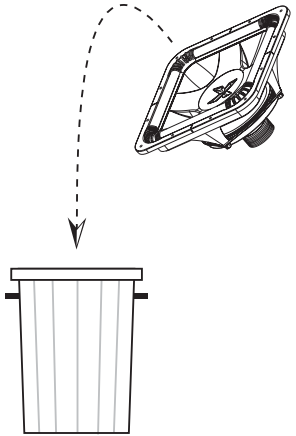


ATTENTION!

2. Install the Gap Cap into the BAM around the pole-piece to protect the motor assembly from debris while you are changing the SPAIR. *If any metal shavings or pieces of speaker wire were to fall into the gap, they would be next to impossible to remove! Please use the Gap Cap!*

3. With the Gap Cap now installed disconnect the speaker wires from the SPAIR.





4. Discard damaged SPAIR. The damaged unit does not need to be returned to your Authorized KICKER Dealer or to KICKER (Stillwater Designs) unless requested to do so. *You might want to hang it on your trophy wall...all big game hunters do this when they bag a 10 point.*

WIRING

The SoloX S18XSP SPAIR assemblies are available with dual 2 Ohm (W) or dual 1 Ohm (W) voice coils.

SINGLE AMPLIFIER

If operating the SoloX 18 with a single amplifier you will need to connect both coils to that amplifier by series or parallel wiring of the coils. Choose the method that is most compatible with your amplifier.

DUAL 2Ω SERIES = 4Ω

Series wiring the coils will give you an impedance of 4 ohms.

DUAL 1Ω SERIES = 2Ω

Series wiring the coils will give you an impedance of 2 ohms.

Coil 1 + is connected to your amplifier + speaker terminal.
Coil 1 - is connected to coil 2 + with a short piece of wire.
Coil 2 - is connected to your amplifier - speaker terminal.

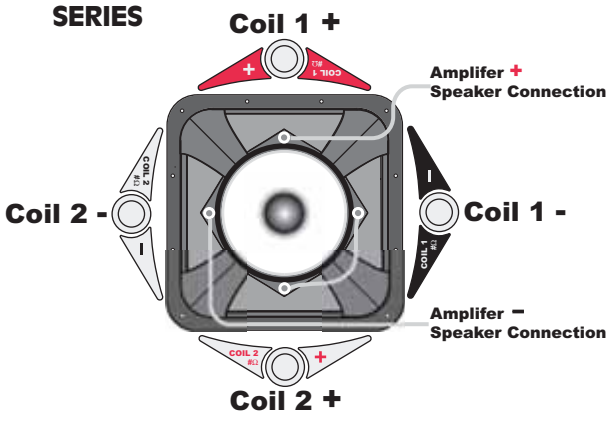
DUAL 2Ω PARALLEL = 1Ω

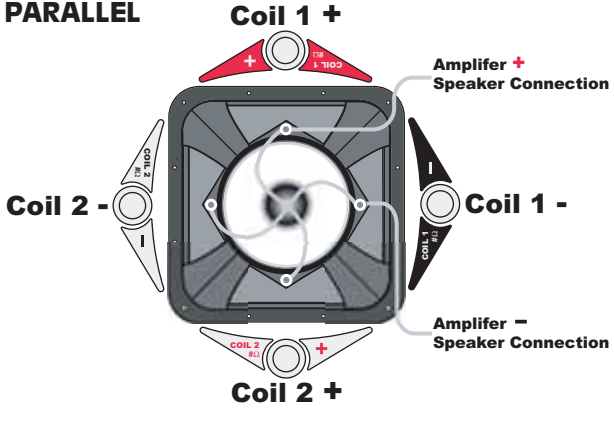
Parallel wiring the coils will give you an impedance of 1 ohm.

DUAL 1Ω PARALLEL = .5Ω

Parallel wiring the coils will give you an impedance of .5 ohm.

Coil 1 + is connected to your amplifier + speaker terminal.
Coil 1 + is connected to coil 2 + with a short piece of wire.
Coil 1 - is connected to your amplifier - speaker terminal.
Coil 1 - is connected to coil 2 - with a short piece of wire.





DUAL AMPLIFIERS

If operating the SoloX with two amplifiers you will need to connect one coil to each amplifier.

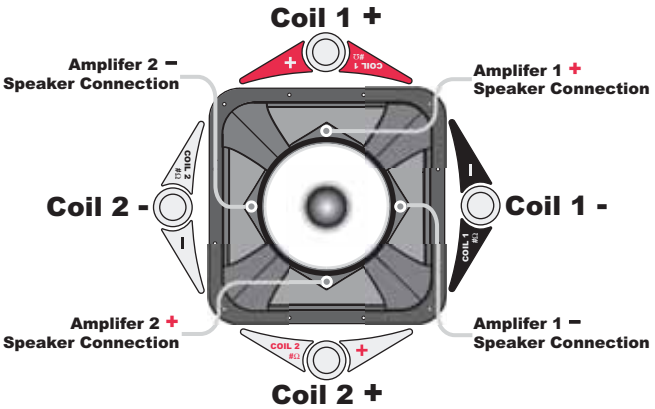
DUAL 2Ω = 2Ω PER AMPLIFIER

Each amplifier will be presented a 2W load.

DUAL 1Ω = 1Ω PER AMPLIFIER

Each amplifier will be presented a 1W load.

Coil 1 + is connected to your amplifier 1 + speaker terminal.
Coil 1 - is connected to your amplifier 1 - speaker terminal.
Coil 2 + is connected to your amplifier 2 + speaker terminal.
Coil 2 - is connected to your amplifier 2 - speaker terminal.



ATTENTION!

The SPAIR is a dual voice coil assembly and as such it is very important that you utilize both voice coils. It may be tempting to use just one coil to achieve an impedance you want or think that the other coil can be saved as a 'spare' (no pun intended)...please fight both these urges!

1. The 'spare' coil philosophy is flawed because in the event you damage one coil, it is 99.999% likely that you have damaged the other coil as well. (in other words...it IS broken dude!)

2. The SoloX/SPAIR was designed to be operated with both voice coils powered up. If you do not use both coils it will change the performance characteristics of the driver; especially power handling.

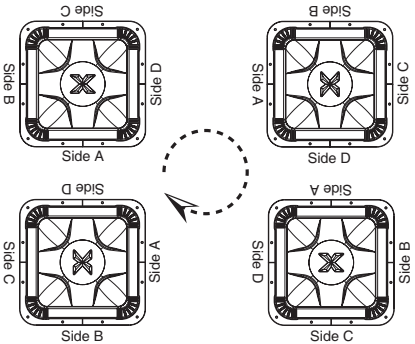
All the power handling specifications given for the SoloX/SPAIR are with the use of both voice coils. If you utilize only one voice coil you will decrease the power handling by 50%; half of what we specify in the SoloX/SPAIR manuals. It will also alter other specifications of the driver which effect performance and enclosure design.

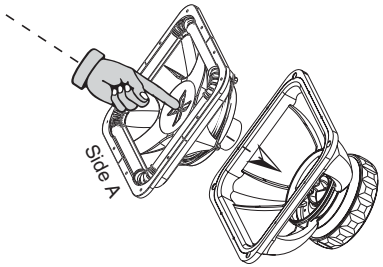
So as you look through these diagrams for wiring up the SPAIR you may be saying to yourself: "Hey self...I can't seem to find an impedance I like using both coils...I will just use one coil". Just tell yourself that is a bad idea and that you should use both coils. Sam and Sid use both voice coils and so should you.

ATTENTION!

If your BAM has a Locator Pin, skip the instructions here on page 7 and move directly to page 8! If your BAM does not have a Locator Pin then you must perform these additional steps before moving to page 8!

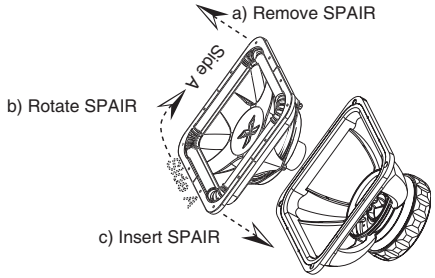
Step 1.) By rotating your SPAIR 90 degrees in relationship to the BAM there are 4 possible ways it can be placed into your SoloX 18 BAM. Due to part tolerance and buildup it is possible that only 1 of these ways will work properly. You will need to test fit each of these 4 ways and use the one that does not show any signs of interference or rubbing.

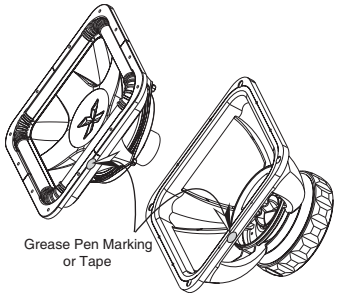




Step 2.) Pick a side of the SPAIR and label it 'Side A'. Insert the SPAIR into the BAM (you may need a friend to hold the SPAIR into the BAM if mounted vertically) and move the SPAIR back and forth by pressing directly in the center of the SPAIR on the 'X'. Make note if there any any signs of rubbing or interference.

Step 3.) Pull the SPAIR out, rotate it 90 degrees and place it back into the BAM. Now move it back and forth again and make note if there any any signs of rubbing or interference. You will need to continue this step until you try all **4** possible combinations. It is possible that 3 of the 4 locations will have interference problems. There will **always be at least 1** of the 4 combinations **that will work properly** and possibly more than one. But there will always be at least **1**!!!





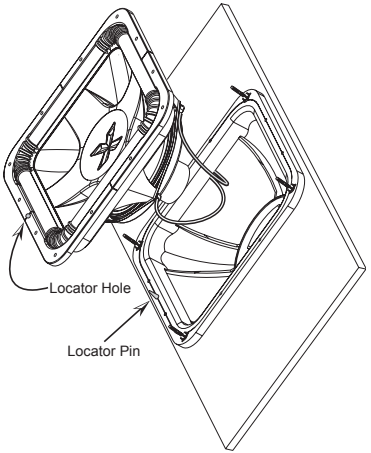
Step 4.) Mark the SPAIR and BAM with a grease pen or piece of tape to identify the **1** mounting configuration that **DOES NOT** have rubbing or interference issues.

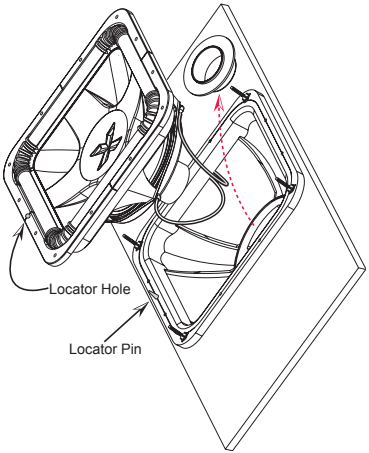
Step 5.) Move to page 8 now and follow the instructions to wire up and mount your SPAIR to the BAM. Ignore any references on page 8 to the Locator Pin and Locator Hole, instead be sure to line up the sides of the BAM and SPAIR with the markings or tape from Step 4.

Reassemble

ATTENTION!

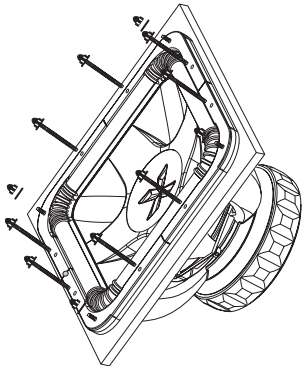
1. Do not remove the Gap Cap before completing this step! Connect your speaker wires to the SPAIR. Use the instructions from the WIRING section for assistance if required. **NOTE:** The Locator Hole of the SPAIR must align with the Locator Pin on the BAM for proper assembly and operation.

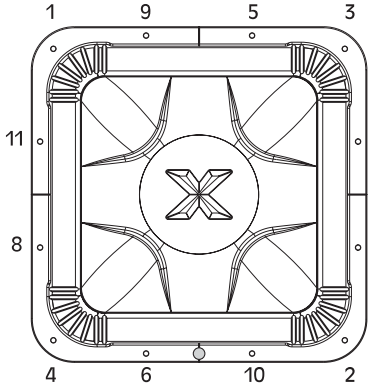




2. You can now remove the Gap Cap and slide the SPAIR assembly back into the BAM. The ARCTIC Cap, four double ended studs sticking up and the Locator Hole/Locator Pin will help you properly align and guide it in. Be sure your speaker wires are free and not pinched between the SPAIR and BAM.

3. With the SPAIR properly seated in the BAM you can now secure it using the (4) four acorn head nuts and (8) eight bolts. Hand tighten all the hardware onto the SLAM first using the pattern shown below.





4. With a 1/4” socket wrench or open end wrench go around and tighten all the hardware following the pattern shown. Use common sense while tightening. All hardware should be snug but not so tight as to crack or damage the SLAM.

5. You’re Done! Pop the top on a nice cold beverage while you admire your work. If you experience any difficulties, contact your local Authorized KICKER Dealer or KICKER directly for further assistance.

Specifications

Model:	S18X1	S18X2
Nominal Impedance *(Impedance per coil)*	1	2
SPL 1W/1M	89.6	89.7
Displacement, cc	3930	3930
Displacement, CuIn	239.8	239.8
Mounting Depth	11-3/8	11-3/8
Revc *(coils in series)*	2.68	4.07
VC Inductance, mH	3.033	4.289
Sd, SqM	0.1426	0.1426
BL	34.54	40.36
Vas, Liters	124.59	177.61
Vas, CuFt	4.40	6.27
Mms, gms	777.5	836.5
Fs	26.9	22.18
Qms	6.167	7.83
Qes	0.302	0.291
Qts	0.288	0.281
Pmax, Peak watts	10000	10000
RMS watts	5000	5000
EXmax, mm *(Excursion maximum)*	24.48	24.48

SoloX Limited Warranty

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed.

Caution: Burnt voice coils are not covered under warranty!

In addition, the warranty does not cover:

* Damaged Spiders.
* Damaged Surrounds.
* Damaged Cones.
* Damaged Tinsel Leads.
* Damaged Voice Coils.
* Damage due to improper installation.
* Subsequent damage to other components.
* Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation.
* Damage through negligence, misuse, accident or abuse.
* Any cost or expense related to the removal or reinstallation of the product.
* Speakers damaged due to amplifier clipping or distortion.
* Speaker with any foreign caulk used for gasket material.
* Items previously repaired or modified by any unauthorized repair facility.
* Return shipping on non-defective items.
* Products with tampered or missing barcode labels.
* Products returned without a Return Merchandise Authorization (RMA) number.
* Freight damage.
* The cost of shipping the product to your Kicker Dealer or Distributor.
* Service performed by anyone other than Kicker.

International Warranty

Contact your International Stillwater Designs (KICKER) dealer or distributor concerning specific procedures for your country's warranty policies.

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STILLWATER Designs®

WARNING:

KICKER drivers are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing.

Please use common sense when controlling volume!

SoloX Limited Warranty

Ok, you have read all the fine print on the previous page describing the warranty on a Solo X Subwoofer, (enough there to make even Judge Judy happy) but what does it all mean? Well, let's just lay it all out in as simple of terms as possible.

The Solo X is a high performance machine that is built to take gobs of power, play extremely loud and create enough low bass to rattle the fillings out of your friend's teeth who lives in the next county. It is built using the finest materials and highest degree of workmanship we have available. It is the NASCAR of subwoofers...designed to be driven hard into all four corners...and we are sure you will drive it just that way!

With all that being said...we know some of you will still be able to break this product…it is a plain and simple fact. When you build an extreme product to be used by extreme people these people can and will find the breaking point...just like Tony Stewart snapping a rod in a motor.

That is why we designed the Solo X to have a permanently mounted BAM (Basket And Motor) assembly with a replaceable soft parts assembly, the SPAIR (Simple Pull Apart Insertable Replacement), so that when you find the breaking point (and if you can still hear or feel) you can re-build it on the spot. If you read the big poster that came with your woofer (you did...right?) you know Sam & Sid told you this thing weighs more than a Mini Cooper (well...really it weighs in at near 100 pounds/45.36 kg). The BAM which is about 90% of the weight in a Solo X stays mounted in your enclosure AND in your car; you simply exchange the much lighter SPAIR. This saves you all the fun of wrestling with the entire Solo X and the ENORMOUS costs of shipping a 100 pound (45.36 kg) woofer to your dealer or distributor.

The SPAIR and all the parts contained within it are not warranted for:

- Burnt, Shucked, Bent, Unraveled or Open Voice Coils.
- Torn, Ripped or Punctured Surrounds.
- Torn, Ripped or Punctured Cones.
- Torn, Ripped or Punctured Spiders.
- Burnt or Frayed Tinsel Leads.

We also do not warranty the SPAIR for:

- Wear and Tear under normal use.
- Product damaged due to abuse.
- Damage to Vehicle and/or other components of the sound system.
- Scattered, Smothered, Covered and Chunked units.

The SPAIR and BAM are not covered under warranty for any damage due to shipping or improper packaging.

So what will KICKER cover under warranty?

- Poor or misaligned glue joints.
- Poor or misaligned parts.
- Material, Machining or Assembly flaws with the BAM.

So in a nut-shell if and when you break it (which takes A LOT) you simply return the soft parts assembly (the SPAIR) to your local dealer and purchase another SPAIR. If there is a problem with the SPAIR and you feel it should be covered under warranty, you will need to contact your International Stillwater Designs (KICKER) dealer or distributor

Special Note: OK that all sounds pretty black and white but we are KICKER and we know stuff happens. If your Solo X stops working and after pulling the SPAIR you find a failure other than that mentioned above that you feel is a manufacturing defect or poor workmanship you may contact your International Stillwater Designs (KICKER) dealer or distributor) for details.

KICKER
LIVIN' LOUD

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